

Appl. No.: 09/809,213
Amdt. dated August 4, 2003
Reply to Office action of June 4, 2003

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously amended) A method of displaying images using an image display device having two displays, each display being arranged in the image display device so as to be capable of presenting an image to an eye of a user, the method comprising:
- dividing image signal data into a first portion, the first portion comprising a first reduced data set defining the entire image, and a second portion, the second portion comprising a second reduced data set defining the entire image, the first portion differing from the second portion;
 - generating a right display signal using the first portion of the image signal data;
 - generating a left display signal using the second portion of the image signal data;
 - transmitting the right display signal to a right one of the displays;
 - transmitting the left display signal to a left one of the displays;
 - displaying a right image on the right display from the right display signal;
 - and
 - displaying a left image on the left display from the left display signal, substantially simultaneously with the displaying of the right image.
2. (Original) The method of claim 1, wherein the image signal data includes data capable of describing a source image arrangeable into an array of columns and rows, the step of dividing image signal data comprising:
- selecting a right set of image data values from the image signal data corresponding to selected points on the array of the source image,

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the right set of image data values being used to form the first portion of the image signal data; and
selecting a left set of image data values from the image signal data corresponding to selected points on the array of the source image, the left set of image data values differing from the right set of image data values, and being used to form the second portion of the image signal data.

3. (Original) The method of claim 2, wherein the step of selecting a left set of image data values includes the step of selecting image data values of which none are included in the right set of image data values.
4. (Original) The method of claim 2, wherein the step of the step of dividing image signal data comprises:
transmitting the right and left sets of image data values to an address calculator.
5. (Original) The method of claim 2, wherein the step of generating a right display signal comprises:
formatting the right set of image data values.
6. (Original) The method of claim 5, wherein the step of generating a left display signal comprises:
formatting the left set of image data values.
7. (Original) The method of claim 1, wherein the step of displaying a right image on the right display comprises the step of displaying a right image of $n \times m$ resolution, and the step of displaying a left image on the left display comprises the step of displaying a left image of $n \times m$ resolution, wherein n and m are integers.

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8. (Original) The method of claim 1, comprising:
sampling a source image signal to produce the image signal data.
9. (Original) The method of claim 8, wherein the step of sampling a source image signal comprises:
sampling a frame of the source image signal to produce the image signal data.
10. (Previously amended) A method of displaying images using an image display device having two displays, each display being arranged in the image display device so as to be capable of presenting an image to an eye of a user, the method comprising:
displaying a right image on a right display using a first portion of a source image signal, the first portion comprising a first reduced data set defining the entire image; and
displaying a left image on a left display using a second portion of the source image signal, the second portion of the source image signal differing from the first portion of the source image signal, the second portion comprising a second reduced data set defining the entire image.
11. (Original) The method of claim 10, wherein the step of displaying the left image includes displaying the left image substantially simultaneously with the displaying of the right image.
12. (Original) The method of claim 10, comprising:
dividing the source image signal into the first portion of the source image signal and the second portion of the source image signal.
13. (Original) The method of claim 12, wherein the source image describes a frame of a source image, the dividing step comprising:

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selecting image data values describing a first portion of the frame to
generate a right set of image data values; and
selecting image data values describing a second portion of the frame to
generate a left set of image data values.

14. (Original) The method of claim 13, comprising:
sampling the source image signal.

15. (Original) The method of claim 10, wherein the step of displaying a right
image comprises the step of displaying a right image of $n \times m$ resolution, and the
step of displaying a left image comprises the step of displaying a left image of $n \times$
 m resolution, wherein n and m are integers.

16. (Previously amended) An image display device, the device comprising:
a controller arranged to utilize a first portion of image signal data to
generate a right display signal, and to utilize a second portion of
image signal data to generate a left display signal, the first portion
of the image signal data and the second portion of the image signal
data being obtained from a source image signal, the first portion
comprising a first reduced data set defining the entire image, and
the second portion comprising a second reduced data set defining
the entire image;
a right display operably connected to the controller to receive the right
display signal and to utilize the right display signal to display a right
image to a right eye of a user; and
a left display operably connected to the controller to receive the left display
signal and to utilize the left display signal to display a left image to a
left eye of a user, wherein the right display signal differs from the
left display signal.

17. (Original) The image display device of claim 16, further comprising:

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an image source for generating the source image signal.

18. (Original) The image display device of claim 16, wherein the controller comprises:

a sampler, the sampler being disposed to receive the source image signal from the image source and to generate image signal data therefrom.

19. (Original) The image display device of claim 16, wherein the image source includes a digital storage medium.

20. (Original) The image display device of claim 16, further comprising:
a right lens disposed to modify the image displayed by the right image display; and
a left lens disposed to modify the image displayed by the left image display device.

21. (New) A method, comprising:
generating first and second sets of pixels from an input image using different portions of the input image; and
providing the first and second sets of pixels to a left eye display and right eye display, respectively.

22. (New) The method of claim 21 wherein the input image comprises an array of pixels having rows and columns, and wherein generating the first and second sets of pixels comprises selecting different rows and columns of the input image when generating the first set of pixels than when generating the second set of pixels.

23. (New) The method of claim 21 wherein the input image comprises an array of pixels having rows and columns, and wherein generating the first and

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second sets of pixels comprises selecting different columns from the input image when generating the first set of pixels than when generating the second set of pixels.

24. (New) The method of claim 23 wherein generating the first and second sets of pixels also comprises averaging pixels in adjacent rows.

25. (New) An image display device, comprising:

a left eye display;

a right eye display; and

a controller coupled to the left and right eye displays, wherein the controller receives an input image and, from the input image, generates a left eye image to be shown on the left eye display and a right eye image to be shown on the right eye display;

wherein the controller generates the left and right eye images using portions of the input image, wherein the portion use to generate the left eye image differs from the portion used to generate the right eye image.

26. (New) The image display device of claim 25 wherein the input image comprises an array of pixels having rows and columns, and wherein the controller selects different columns of the input image when generating the left eye image than when generating the right eye image.

27. (New) The image display device of claim 26 wherein the controller also averages pixels in adjacent rows when generating the left and right eye images.

28. (New) The image display device of claim 25 wherein the input image comprises an array of pixels having rows and columns, and wherein the controller selects different rows and columns of the input image when generating the left eye image than when generating the right eye image.